

# BREAKTHROUGH SCIENTIFIC RESEARCH SHOWS MEMORY FOAM PILLOW REDUCES FLAT HEAD SYNDROME IN BABIES

Press Release

Clevamama™ / Handy Baby Products Ltd, Dublin17, Ireland  
[www.clevamama.com](http://www.clevamama.com) : [suzannebrowne@clevamama.com](mailto:suzannebrowne@clevamama.com) : +353 1 8770724

## Plagiocephaly Research

By Suzanne Browne



TRINITY COLLEGE DUBLIN  
COLÁISTE NA TRÍONÓIDE, BAILE ÁTHA CLIATH

THE UNIVERSITY OF DUBLIN

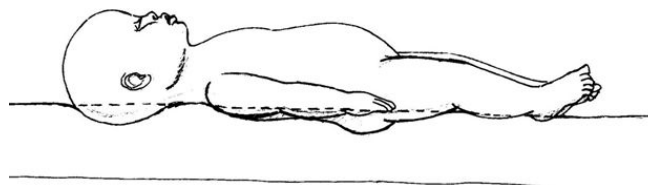
New research from Trinity College has found that using a Clevamama™ memory foam pillow instead of a standard mattress can significantly reduce 'flat head syndrome' common in young babies.

Deformational Plagiocephaly, the medical condition more commonly known as 'Flat Head Syndrome', which affects many infants, especially since the introduction of recommendations to place sleeping babies on their backs in order to prevent cot death. Torticollis can also lead to Flat Head Syndrome. This condition is caused by a tight or shortened muscle in one side of your baby's neck causing the head to tilt or turn to one side, resulting in the infant resting its head in the same position on a continual basis. For example, Holles Street maternity hospital in Dublin has reported seeing on average six cases per week, equivalent to more than 300 cases per year and Doctors at Great Ormond Street Hospital, London estimate that the incidence may be as high as 48%.

Researchers at Trinity College Dublin's Centre for Bioengineering performed a scientific analysis of the Clevamama™ Memory Foam Baby Pillow and found that it can reduce the pressure on an infant's skull which aggravates flat head syndrome.



Using a computational model of a baby's head, the researchers investigated the biomechanics of contact between the soft back of the skull and supporting materials - first, a generic mattress typically found in cots and then, the Clevamama™ polyurethane foam pillow placed on top of the same mattress.



The study found both lower stress distribution and lower strain energy density when using the Clevamama™ memory foam pillow compared to the mattress by itself. The pillow reduced the pressure on the baby's cranium by almost 50 per cent, while providing more than 80 per cent more contact with the head. The tests also found that the pillow's profile is sufficiently low and the material is not too stiff, the baby's head will be allowed to rest in a natural position that does not restrict the airways.

Commenting on the research findings, Alexander Lennon, research fellow at Trinity College Dublin and co-author of the study, said: "There has been little study so far into the biomechanics that cause deformational plagiocephaly. We believe this research is an important first step and goes a long way to advancing our understanding of potential mechanisms, and treatments, for flat head syndrome."

The research was undertaken by the Trinity Centre for bioengineering team for Handy Baby Products Ltd, which manufactures the Clevamama™ Memory Foam pillows. Martina Delaney, co-founder of Handy Baby said: "Many parents are worried about flat head syndrome and this can cause them to spend a lot of money on physiotherapy or in extreme cases, orthotic helmets which can cost several thousand pounds. We're delighted that this research has validated our theory that a Clevamama™ memory foam pillow can be an effective, inexpensive and safe way to treat the problem."

*"Plagiocephaly can affect babies from birth. Premature babies are at greater risk"*

For further information contact  
Alexander Lennon, Trinity College Dublin  
+353 1 896 3393  
[lennonab@tcd.ie](mailto:lennonab@tcd.ie)  
Suzanne Browne, Clevamama™  
+353 1 877 0722  
[suzannebrowne@clevamama.com](mailto:suzannebrowne@clevamama.com)